

Notice of Allowability

Application No.

10/693,482

Applicant(s)

AKSENOV ET AL.

Examiner

Art Unit

Rodney G. McDonald

1795

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to Response filed 10-19-07.
2. ☒ The allowed claim(s) is/are 1-31.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).


* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____


RODNEY G. MCDONALD
PRIMARY EXAMINER

REASONS FOR ALLOWANCE

The following is an examiner's statement of reasons for allowance:

Claims 1-11 are allowable over the prior art of record because the prior art of record does not teach direct current magnetic coils surrounding the input and output rectilinear plasma ducts supplemented by first and second magnetic field lines adjustment magnetic coils disposed around the input and output rectilinear plasma ducts at the right angle junction and energized by electrical energy power supplies; and the electrical energy power supplies for the direct current magnetic coils surrounding the input and output rectilinear plasma ducts and for the magnetic field lines adjustment magnetic coils include magnetic field adjustment means for configuring magnetic field lines within the output plasma duct as smooth, plasma conveying, low plasma loss continuations of magnetic field lines within the input plasma duct.

Claims 12-15 are allowable over the prior art of record because the prior art of record does not teach enhancing the curvilinear pattern of plasma flow controlling magnetic flux lines within the right angle bend-inclusive plasma magnetic filter apparatus by adding output duct entrance magnetic coil and corrective magnetic element magnetic fluxes to the curvilinear pattern; the output duct entrance magnetic coil and corrective magnetic coil element magnetic fluxes limiting losses from a flow of selected plasma components traversing the filter apparatus along the magnetic flux lines; the enhancing and limiting steps including altering the established equipotential flux lines with supplementing magnetic flux received from output duct entrance magnetic coil and multi planar corrective magnetic coil element flux sources of

selected flux configuration and flux magnitude disposed adjacent the right angle bend of the filter apparatus.

Claims 16-23 are allowable over the prior art of record because the prior art of record does not teach the claimed subject matter including the second plurality of electromagnetic field generating elements also including a pair of saddle shaped magnetic coils surrounding the input portion and adjacent the output portion of the path of particle axial communication in locations immediately preceding and immediately succeeding the right angle bend.

Claims 24-31 are allowable over the prior art of record because the prior art of record does not teach the claimed subject matter including a first saddle shaped ion path correcting magnetic coil disposed surrounding the input duct element in a downstream location preceding the output duct element and partially surrounding said output duct element adjacent the input duct element and energized by a source of selected magnitude electrical energy; and a second saddle shaped ion path correcting magnetic coil disposed surrounding the input duct element in a downstream location succeeding the output duct element and partially surrounding the output duct element adjacent the input duct element and energized by a source of selected magnitude electrical energy.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Application/Control Number:
10/693,482
Art Unit: 1795

Page 4

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rodney G. McDonald whose telephone number is 571-272-1340. The examiner can normally be reached on M-Th with every Friday off..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nam X. Nguyen can be reached on 571-272-1342. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Rodney G. McDonald
Primary Examiner
Art Unit 1795

RM
December 31, 2007